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October 4, 1996

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Federal Communications Commission
Office of Secretary

**BY HAND** 

Mr. William F. Caton Secretary Federal Communications Commission 1919 M Street, N.W. Room 222 Washington, D.C. 20554

Re:

Ex Parte Presentation in MM Docket No. 87-268, Advanced
Television Systems and Their Impact Upon the Existing Television
Broadcast Service

Dear Mr. Caton:

Today, on behalf of our client, Compaq Computer Corporation ("Compaq"), we delivered the attached letters and accompanying text of a recent speech by Eckhard Pfeiffer, President and CEO of Compaq, to: Chairman Reed Hundt, Commissioners Rachelle B. Chong, Susan Ness, and James H. Quello, Dr. Robert Pepper, and Saul Shapiro.

Questions concerning this matter can be directed to the undersigned.

Respectfully submitted,

Kevin S. DiLallo

Counsel for

Compaq Computer Corporation

Kein & Staller

**Enclosures** 

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1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

### **BY HAND**

Mr. Saul Shapiro
Assistant Bureau Chief for
Technology Policy
Mass Media Bureau
Federal Communications Commission
1919 M Street, N.W.
Room 310
Washington, D.C. 20554

Re:

Ex Parte Presentations in MM Docket No. 87-268, Advanced
Television Systems and Their Impact Upon the Existing Television
Broadcast Service

Dear Saul:

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

If you have any questions concerning Mr. Pfeiffer's speech, please call either the undersigned or Jeff Campbell of Compaq Computer, (202) 962-3830.

Sincerely yours,

Kevin S. DiLallo

Counsel to

**Compaq Computer Corporation** 

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1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

#### **BY HAND**

Dr. Robert M. Pepper Chief Office of Plans and Policy Federal Communications Commission 1919 M Street, N.W. Room 822 Washington, D.C. 20554

Re: <u>Ex Parte Presentations in MM Docket No. 87-268, Advanced</u>
<u>Television Systems and Their Impact Upon the Existing Television</u>
Broadcast Service

Dear Dr. Pepper:

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

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Sincerely yours,

Kevin S. DiLallo

Counsel to

Compaq Computer Corporation

Kenin S. Stallo

1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

#### BY HAND

Hon. Reed E. Hundt Chairman Federal Communications Commission 1919 M Street, N.W. Room 814 Washington, D.C. 20554

Re:

Ex Parte Presentations in MM Docket No. 87-268, Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service

Dear Chairman Hundt:

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

If you have any questions concerning Mr. Pfeiffer's speech, please call either the undersigned or Jeff Campbell of Compaq Computer, (202) 962-3830.

Sincerely yours,
Koura S. Hallo

Kevin S. DiLallo

Counsel to

Compaq Computer Corporation

1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

#### BY HAND

Hon. Rachelle B. Chong Commissioner Federal Communications Commission 1919 M Street, N.W. Room 844 Washington, D.C. 20554

Re: <u>Ex Parte Presentations in MM Docket No. 87-268, Advanced</u>
<u>Television Systems and Their Impact Upon the Existing Television</u>
Broadcast Service

**Dear Commissioner Chong:** 

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

If you have any questions concerning Mr. Pfeiffer's speech, please call either the undersigned or Jeff Campbell of Compaq Computer, (202) 962-3830.

Sincerely yours,

Kevin S. DiLallo

Counsel to

**Compaq Computer Corporation** 

1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

## **BY HAND**

Hon. James H. Quello Commissioner Federal Communications Commission 1919 M Street, N.W. Room 802 Washington, D.C. 20554

Re:

Ex Parte Presentations in MM Docket No. 87-268, Advanced
Television Systems and Their Impact Upon the Existing Television
Broadcast Service

Dear Commissioner Quello:

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

If you have any questions concerning Mr. Pfeiffer's speech, please call either the undersigned or Jeff Campbell of Compaq Computer, (202) 962-3830.

Sincerely yours,

Kevin S. DiLallo

Counsel to

**Compaq Computer Corporation** 

Kenia & Stallo

1300 CONNECTICUT AVENUE, NW SUITE 500 WASHINGTON, D.C. 20036-1703 (202) 223-4980 FAX (202) 223-0833 October 5, 1996

#### **BY HAND**

Hon. Susan Ness Commissioner Federal Communications Commission 1919 M Street, N.W. Room 832 Washington, D.C. 20554

Re: <u>Ex Parte Presentations in MM Docket No. 87-268, Advanced</u>

Television Systems and Their Impact Upon the Existing Television

Broadcast Service

**Dear Commissioner Ness:** 

Earlier this week, Eckhard Pfeiffer, President and CEO of Compaq Computer Corporation, delivered the enclosed speech about Advanced Television and other issues before the National Press Club. Mr. Pfeiffer's comments echo many of the positions taken by other members of the computer industry in the *Advanced Television* proceeding, and we thought they would be of interest to you.

If you have any questions concerning Mr. Pfeiffer's speech, please call either the undersigned or Jeff Campbell of Compaq Computer, (202) 962-3830.

Sincerely yours,

Kevin S. DiLallo

Counsel to

**Compaq Computer Corporation** 

Eckhard Pfeiffer
President and CEO
Compaq Computer Corporation
National Press Club Luncheon
Washington, D.C. (As Prepared For Delivery)

# Making Headway Towards The Vast Wonderland: The Dawn of an Interactive Digital Age.

Good afternoon, ladies and gentlemen.

I'd like to begin by taking you back 35 years.

On May 9, 1961 ... then FCC chairman Newton Minow stepped up to the podium of what is now the Sheraton Washington Hotel ...

And he issued a challenge to those attending the National Association of Broadcasters annual convention.

He said, "I invite you to sit down in front of your television set when your station goes on the air."

"Stay there without a book, magazine, newspaper, or profit and loss sheet to distract you ... and keep your eyes glued to that set until the station signs off.

"I can assure you" ... he said ... "that you will observe a vast wasteland."

When Minow spoke that enduring phrase -- vast wasteland -- I was just entering my twenties.

The contrast could not be more dramatic between the very limited control my analog TV enabled then ... and the nearly complete control my PC enables now.

With my PC and the Internet ... I can get my <u>first choice</u> of interactive digital information and entertainment ... whenever I want it ... no matter where in the world I happen to be.

What's more ... the PC and the TV are <u>coming together</u> even as we speak ... and in their convergence is the opportunity to take advantage of the best of both worlds ... or what I might call an emerging "<u>vast wonderland</u>."

This afternoon ... I want to talk about the journey from wasteland to wonderland

Why making the journey is important ... and what we can do to hasten our arrival at this new destination.

Perhaps the place to start is with television.

At the time of Minow's remarks ... ABC, CBS, and NBC commanded more than 90 percent of viewing time ... and cable TV served about a million homes.

Today, these networks' combined share hovers around <u>50 percent</u> ... and cable serves more than <u>63 million</u> households ... which are watching 137 national networks.

Even if you believe with David Frost that TV enables you to be entertained in your home by people you wouldn't invite into your home ... today's range of channels is impressive.

That said, TV technology's best days lie ahead.

As Bob Pepper ... Chief of the FCC's Office of Plans and Policy ... observed ... we're only in the <u>early</u> stages of TV's evolution.

Ahead, for example, lies TV's transformation from analog to <u>digital</u> ... which will greatly improve picture and sound quality ... and dramatically increase the <u>control</u> viewers have over their viewing.

In short, tomorrow's TV will offer not only a multitude of choices ... but truly customized choices with full interactivity.

Does that capability ring a bell?

Sounds a lot like today's PC and Internet ... doesn't it?

From Compaq's research with consumers ... we find that <u>today's</u> multimedia PC speaks to the interests of even the most dedicated couch potatoes.

Yes, they still want to be able to "veg out" -- that's right up there with life, liberty, and the pursuit of happiness.

But they're starting to grow restless for a richer, more absorbing and <u>customized</u> experience than today's TV offers.

In fact, according to a recent study by strategic consulting firm Inteco ... more than 18 million Americans are watching television less ... and spending that time using their personal computers.

It seems the personal computer is beginning to <u>challenge</u> and ... in some cases ... <u>surpass</u> the TV as the home information appliance of choice.

Why is this happening?

Well, today's Digital Age consumers ... especially the "wired" generation reared on E-mail, MTV, video game machines, and, of course, the Internet ... <u>crave</u> interaction ... connection ... and unlimited choice.

Just one year ago ... the Harper's (magazine) Index noted that the chances an American child over the age of 9 can define the word "Internet" were 1 in 6.

Today, I'll bet that's more like 5 in 6.

Today's wired youth want to connect to one another ... to the Net ... to chat groups ... to on-line services ... to computer-game tournaments ... to the ocean of information and conversations in cyberspace.

And they've latched onto the connection machine par excellence -- the PC.

Consumers also like the PC's unmatched versatility.

Think about it ... the same PC can be used today as a telephone, a fax machine, a modem, scanner, copier, radio, CD player, TV, game machine, and Net surfer.

I believe the PC is the <u>one</u> digital tool that can integrate and make sense of <u>all</u> the diverse information streams that consumers will be pulling into their intelligent, networked homes of the future.

I used this digital tool to surf the Net and do a little research about <u>this city's</u> history.

I learned ... for example ... that when Pierre-Charles L'Enfant first discovered Jenkins Hill in 1790 ... he described the site that's now the base of The Capitol as "a pedestal waiting for a superstructure."

Well, cyberspace also has its <u>pedestal</u> waiting for a superstructure.

That pedestal is the powerful combination of the PC and the Internet.

Together, they are supporting a new <u>digital superstructure</u> ...

- for electronic commerce;
- for Web-based public offerings, stock exchanges, and banks;
- for virtual newsrooms and virtual job markets;
- the digital delivery of healthcare and public sector services to the home;
- and a new <u>education model</u> that can bring information, experts, and study aids to your PC, wherever you may be.

Many of the cornerstones for this superstructure are already in place.

For starters, the vehicles needed to navigate the Web are widespread.

This year the PC industry will ship some <u>70 million</u> PCs worldwide ... the vast majority of them loaded with Windows 95 and browsers ... making Internet access quite straightforward.

As for the building blocks of the Internet ... meaning the <u>servers</u> that hold the content ... it's estimated that some 10 million are plugged into the Net on a <u>dedicated</u> basis.

According to those who run the high-powered search engines like InfoSeek and Yahoo! ... these Web servers hold between 30 million and 50 million pages.

To put those numbers in perspective ... Wired magazine says that in two years ... the Web will surpass the roughly 29 terabytes currently in the Library of Congress.

Of course, far more important than the volume of Web pages ... is the volume of <u>creativity</u> and <u>entrepreneurship</u> being applied to the Internet.

I think ... for example ... of a small Belgian company called Ecover ... that makes cleaning products from renewable raw materials.

According to its CEO ... its core technology <u>isn't</u> biology ... isn't chemistry ... or even engineering.

Its core technology is the Internet.

The company uses the Net to support a <u>global team</u> of experts who swap ideas ... brainstorm about problems ... and conduct experiments.

It seems the Net is changing the very nature of what constitutes a <u>core</u> <u>competence</u>.

I also think of the many, many stories of people who are battling disabling diseases like cancer ...

And who turn to the World Wide Web and its <u>communities of relationship</u> to exchange information and seek comfort and support.

Looking out to the year 2000 ... the Internet's power to serve as a worldwide web of support is only going to increase ... as the Net advances from a global information-sharing resource ... to a live, real-time multimedia communications platform.

In fact, we at Compaq are convinced the Internet will live up to its promise of fundamentally <u>remaking</u> personal and business communications ... and pulling together computers, networks, and -- most important -- people.

It's driving <u>millions</u> of new consumers around the world to PCs ... and creating major new demand for servers and internetworking equipment like hubs and routers.

(Pause)

So far ... I've tried to convey something of Compaq's optimism about the Internet's momentum and boundless opportunity.

I truly believe a vast wonderland is in view.

But I'll be the first to say that we have <u>miles</u> to go to reach our destination ... and a number of critical issues to resolve.

This afternoon, I'll call your attention to just three of these issues.

The first is ease of use.

To achieve the next breakthrough in <u>global acceptance</u> of the PC and the Internet ... the computer industry needs to achieve a quantum improvement in ease of use.

PCs have followed a relentless rapid upgrade cycle in processors ... operating systems ... storage ... and communications ... chasing ever-higher performance and functionality ... but leading to greater and greater complexity.

And this <u>complexity</u> is clearly a problem ... for consumers and commercial customers.

Let's focus on consumers.

A large and growing number of people think the PC has the potential to become the <u>best platform</u> for modern communications ... meaning voice, voice services, E-mail, videoconferencing, E-mail paging, Internet access, and more.

For that to happen ... the PC will have to take a lesson from a device that's the gold standard of simplicity -- the telephone.

Its keypad offers one of the world's few universal interfaces.

And getting dial tone is so simple that I've heard of dogs being trained to dial "9-1-1" in an emergency.

Compare that with the PC ... and it's clear just how much work the computer industry has ahead of it.

For starters ... the consumer PC must quickly become much more like an appliance.

It needs to be always <u>on and ready</u> ... modular and easily expandable ... and as intuitive as a TV.

Compaq has significant work under way to achieve a major improvement in ease of use ... work that's been aided by valuable feedback from the Wall Street Journal's Walt Mossberg and others who serve as computer ombudsmen.

We're resolved to humanize the PC experience ... and <u>delight</u> customers over the entire product life cycle ... from initial purchase to replacement.

To get a sense of where we're heading ... consider the Easy Access Buttons on the front of our newest Presario PCs for the home.

Press a single button -- no need to boot up the PC -- and you gain access to the phone answering device ... multimedia features ... and on-screen help.

But that's just the very beginning.

We're cooperating with Microsoft and Intel on the Simply Interactive PC ... which calls for a simple to use ... low maintenance device that's easy to integrate with other consumer electronics equipment.

We're also engaged in initiatives to define new specifications and architectures as well as new approaches to the way PCs are upgraded.

We're equipping all of our consumer and commercial platforms with the software, browsers, network security, and communications technologies needed to access and navigate the Web with ease.

And because of our commitment to simplified computing ... we fully embrace the concept of a <u>network computer</u> -- also known as an Internet appliance or information appliance.

The rapid emergence of these devices is creating a <u>fundamental shift</u> in the way computing and communications will be done in the office, on the road, and at home.

Internet appliances will assume a variety of shapes and offer a range of functions - including Web access ... E-mail ... access to corporate <u>intra</u>nets ... electronic shopping ... as well as personal productivity applications.

For example ... devices that are really remote controls with built-in Web browsers are beginning to hit the market.

And in the commercial arena ... information appliances are a natural replacement for the back-office, limited function terminal that's used primarily for transaction data processing.

What's key is that these devices will <u>expand</u> the market by offering lower functionality and a very <u>simple user interface</u> ... at dramatically lower price points ... \$300 or less in some cases.

In fact, these appliances will open up a huge new market opportunity that we see as <u>an addition</u> to the current PC demand ... demand that will most definitely continue to grow.

You can be certain that Compaq has an <u>all-out</u> effort to develop an array of specialized, low-cost Internet appliances for consumer and commercial customers.

Let's turn to a second issue.

Delivering the vast wonderland will <u>not</u> be the province of any <u>single</u> industry acting alone.

The coming era of digital personal communications is an era of converging technologies, converging products, converging media, and converging industries.

More and more ... the computer, broadcast, cable, telephone, satellite, media, and entertainment industries will find themselves part of a much larger marketplace.

These industries must learn to compete in broad markets driven by consumer needs ... rather than be protected from competition in their traditional market segments.

Just as important ... these industries need to look beyond their historical boundaries ... and engage more routinely in <u>cross-industry</u> cooperation.

Who would disagree with Alexander Graham Bell's observation that "great discoveries and improvements invariably involve the cooperation of many minds."

Such <u>cooperation</u> is as key to creating the "vast wonderland" ... as it was to developing the airline industry or creating the manned space program.

Compaq is practicing the cooperation we preach.

On the commercial side ... we've made partnerships a way of life.

Our cooperative relationships with the market leaders in processors, operating systems, applications, and browsers ... number in the hundreds.

For us, partnerships are fundamental to creating maximum customer value.

On the consumer side ... they play just as significant a role.

We are working closely with a number of consumer electronics companies to develop a new generation of home entertainment products that will combine the ease of use of consumer electronics ... with the interactivity of PCs.

Internet capability will be just one of many applications that will transform the private experience of the PC ... into an entertainment and information experience the whole family can share.

To be sure, the most powerful shaper of the emerging vast wonderland will be <u>customers'</u> ever-changing wants and needs.

But it's important to recognize that the communications <u>policy making</u> community here in Washington will have an important role, too.

This leads to the last issue I'll focus on for now.

And that's the need for the FCC to establish some new "<u>rules of the game</u>" that will promote the convergence of computing and communications ... and foster the growth of competitive markets.

The Telecommunications Act of 1996 gives the FCC the historic opportunity to do just that.

I'm heartened by FCC Chairman Reed Hundt's philosophy on the importance of vigorous competition.

On this point he says, "In the long run, the FCC won't dictate the winners and losers.

"That will be decided by the capital markets, the entrepreneurship of individuals in big and small companies, and the power of invention."

We couldn't agree more!

And now, we would like to see his words take hold in practice.

The current controversy about advanced television -- also known as High Definition TV -- illustrates how much work needs to be done.

Since the late '80s ... the broadcasting industry has been trying to reach agreement on a <u>digital</u> broadcasting standard that would substantially improve the picture and sound quality of television.

In May ... the FCC formally asked for comments on proposed standards that reflect the thinking of a coalition of U.S. and European companies and researchers -- a coalition known as the Grand Alliance.

The Grand Alliance is asking the FCC to <u>mandate</u> that broadcasters use one of <u>18</u> transmission formats ... and that <u>all</u> TV receivers -- including PCs with TV capability -- be equipped with the circuitry and processing power to decode all 18 formats.

Compaq and several other computer industry leaders -- including Intel, Microsoft, and Apple -- have a <u>huge problem</u> with establishing these formats through federal regulation.

For starters ... it means that PCs would have to be able to decode all 18 transmission formats or face the prospect of a blank screen.

In fact, the Grand Alliance proposal would require some formats that are <u>incompatible</u> with computer displays.

Making them compatible would substantially <u>raise the cost</u> of computers capable of receiving digital TV signals.

Our larger concern ... however ... is that mandating formats will <u>impede</u> innovation and slow the arrival of the future.

Let's keep in mind that the future of advanced TV is about much more than higher resolution pictures.

It's also about new forms of information-rich programming ... such as the ability to ...

- bore into a televised news story to a depth of your choosing;
- or watch a foreign movie in your own language without subtitles;
- or view a sports event from the perspective of any seat in the stadium.

So what does Compaq propose?

Along with key members of the Hollywood creative community ... we want the FCC to adopt a base transmission layer to ensure nationwide uniformity --- but only a single, simple format.

This will still enable a considerable improvement over current TV pictures ... yet will require fewer electronic components and less processing power.

Formats designed especially for large-screen advanced TV would still be useable ... but as the <u>market determines</u> the need ... rather than as federal regulations mandate.

We are ready to work with other industries to find a common approach.

I feel certain we can find solutions that are <u>broad enough</u> to suit the needs of <u>all</u> the players ... and forward-looking enough to enable future applications.

We should not have to ask the FCC to choose.

I think President Clinton shares this perspective.

In last week's *Broadcasting & Cable* magazine ... he was asked, "Should the FCC mandate a standard for digital TV broadcasting?"

President Clinton answered this way.

"The best standard," he said ... "would be one developed by and supported by <u>all</u> the affected industries, which could then be endorsed by the FCC."

"We want to make sure," he continued ... "that there are <u>no roadblocks</u> to future compatibility between television and computers."

I say amen to that.

While I'm standing here talking about the FCC ... I must also give voice to today's bandwidth crisis and remind the Commission of all the work that needs to be done.

For the average consumer ... in many areas of the country ... abundant, affordable, easy to use communications bandwidth to the home remains elusive.

Yet <u>without</u> sufficient bandwidth ... which is all about the transmission rate of data ... consumer frustration with slow response times will mount and the Internet's likelihood of becoming a resource for all people will diminish.

So, Compaq strongly advocates an environment where the carriers are encouraged to provide lots of inexpensive communications bandwidth ... particularly in the local loop ... to homes, public schools, and libraries.

In fact, the Internet gives governments around the world the opportunity to reinvent their communications policies ... and change them in a way that fosters the broadest possible access to global networks.

<u>In closing</u>, let's remember that the computer and communications industries are <u>freeing</u> information and human interaction from the constraints of time, space, and distance.

If we emphasize a shared vision of easily-accessed, rich content ... if we listen and respond to customers ... and redouble our efforts to reach common ground for the common good ... I think we'll not only realize the potential of the vast wonderland ... but also establish it as a legacy from the Twentieth Century to the new millennium.

# # #